

# Luis Angel Espino Cervantes

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## Education

University of California, Irvine

June 2022

Bachelor of Science in Computer Science

GPA: 3.18 (Dean's List UC Irvine • 5 quarters)

Course Work: **Software Design • Game Systems and Design • Data Management • Computer Vision & Graphics**

## Work Experience

**Autonomous Vehicle Operator: Zoox**

October 2022-Present

Safely monitor L3 autonomous vehicles in testing sessions. Command vehicle software and hardware during testing. Troubleshoot malfunctions in the software in real time. Record and report vehicle performance.

**Instructor: Juni Learning**

April 2022-October 2022

Teach Computer Science concepts using python to K-12 students in remote one-on-one sessions.

**Office Intern: San Mateo County Health Clinic**

June 2018-September 2018

Front desk attendant responsible for checking-in patients, updating personal information, facilitating their visits, and answering the main phone. Multitask taking care of the waiting room, printer refills, and faxes.

## Projects

**Water Simulator (Collision and Blinn-Phong Lighting)**

April 2022-June 2022

Water Simulator is a **WebGL** scene rendering a water surface that supports collision and Blinn-Phong lighting. It renders two cubes that interact with the surface to show the water features.

- Researched physics on water collision with complex objects and implemented a system to mimic it in **WebGL**.
- Introduced Blinn-Phong lighting on the scene objects. I added reflection and fresnels effect to the water plane.
- Adapted simulation into a webpage using **JavaScript** and **HTML** for public interaction.

**Image Recognition Software**

January 2022-February 2022

AI algorithm that learns an object's Histogram of Gradient Orientations by using positive and negative picture samples. It then can identify the same object in static images.

- Created software that is able to recognize specific objects in pictures with a 95% success rate.
- Wrote the function algorithm that learns an object's features from a series of sample images.
- Coded, tested, debugged, and finalized the software using **Python**, **Matplotlib**, and **Numpy** libraries.

**Spotify Browser**

February 2022

Website that searches Spotify's database in real-time. Each search creates a new custom page based on the retrieved data from Spotify's API.

- Constructed front-end features to display album, track, or artist searches using **HTML**, **CSS**, and **Angular** components to enhance User Interaction.
- Build the back-end API handling for each search request using **Express.js** and the OAuth protocol.

**Vaccine Dash (Videogame) Website**

September 2021-December 2021

A single-player adventure horror web game designed and developed by a team of five. The game consists of finding vaccines in a covid-filled dark hospital.

- Integrated player controls and physics of the game, as well as visuals and audio effects into the game levels.
- Developed a narrative for the game's story which added relatability to the player.
- Introduced the game and features in a mock product pitch.

**Sleep Tracker (Mobile App)**

January 2022

Software that records the user's sleeping cycle and sleepiness throughout the day.

- Employed Content Prioritization, Intuitive Navigation, Error prevention, and other **UX/UI** principles.
- Rigorously unit tested the code for **IOS** and **Android** using **Ionic Lab**.
- Developed and designed the app using **Javascript** and **HTML** with the **Ionic** library.

Languages	Python • HTML • C • C++ • SQL • JavaScript • WebGL • MatLab • Unreal • IonicJS • Linux • A-Frame
Skills	Project Management • Attention to Detail • Multitasking • Microsoft Office • Biliterate (Spanish)